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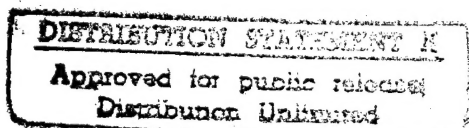
WILL "FORWARD... FROM THE SEA" SUPPORT SEA DRAGON?

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.



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Abstract of

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Sea Dragon is a Marine Corps concept that seeks to maximize the inherent advantages of maneuver warfare and combine them with modern technology. It envisions the employment of small, widely dispersed independent teams of light infantry inserted into enemy controlled territory. Their mission is to gather intelligence and engage enemy forces with supporting arms.

To support Sea Dragon, the Navy must develop a new operational philosophy for the employment and control of amphibious forces. The formation of Naval Expeditionary Action Groups (NEAG), combined with a fully integrated, decentralized command structure, would provide the support needed to ensure Sea Dragon becomes a viable option. Operating "Forward ... From the Sea" in small, independent groups, dispersed throughout the amphibious objective area, the NEAG's are ideally suited to support the fluid and highly dynamic battlefield envisioned by Sea Dragon.

WILL "FORWARD ... FROM THE SEA" SUPPORT SEA DRAGON?

INTRODUCTION

As the Navy enters the 21st century and focuses on operations in the littoral and power projection "Forward ... From the Sea", we must work in concert with the Marine Corps. The Navy-Marine Corps team must continue to make maximum use of evolving technologies and develop new operational concepts to ensure naval forces maintain their ability to project power from the sea whenever and wherever required. Sea Dragon is one such concept that embraces a fundamental shift in the Marine Corps warfighting philosophy from attrition warfare to maneuver warfare. It envisions small independent units operating over a wide area that have the ability to detect and engage enemy forces with supporting arms¹.

The thesis of this paper is not to validate the Sea Dragon concept, but rather to determine if the Navy could support Sea Dragon if the concept was implemented. This paper will look at current naval capabilities and doctrine and compare it to a naval force in 2005 that has the ability to fully support Sea Dragon.

With the post-cold war drawdown just about complete, it is assumed naval force structure will not significantly change in the next ten years. This paper will, however, assume the MV-22 is deployed in reasonable numbers and that the Marine Corps will

¹ COL John Gangle, USMC, Ret, "Sea Dragon ... Forward From the Sea," Lecture, U.S. Naval War College, Newport RI: 7 December 1995.

develop the command, control and targeting systems essential to Sea Dragon. This paper also assumes the LPD-17 class amphibious assault ship has joined the fleet and that the Navy recognizes the need to develop a new operational philosophy for the employment and control of amphibious forces in the 21st century.

Although amphibious doctrine has undergone significant changes since the mid-1980's, during the planning for amphibious operations in support of Desert Storm and later operations off the coast of Somalia, the traditional linear style assault on an enemy controlled coastline was still emphasized. The doctrine relies heavily on synchronization of forces and incorporates an operational pause at the beachhead to build up forces prior to pushing inland.² While the concepts of operational maneuver and deception are used to try to deceive the enemy as to the exact time and location of the attack, once the assault waves start forming up, the enemy is presented with a large concentration of ships that is well within the range of his weapons. He also will be able to determine the approximate size of the main effort and while the initial assault is being made, the enemy will have the opportunity to bring reinforcements to the beachhead. While these reinforcements will certainly be attacked by aircraft and naval gunfire, the lack of ground spotters could reduce their effectiveness. Finally, this type of assault has the potential to quickly degenerate into an attrition style of warfare.

²Charles E. Wilhem, LtGen, "Forward...From the sea: The mine warfare implications," Marine Corps Gazette, July 1995, 23-26.

ENTER THE DRAGON

In the late 1980's the Marine Corps changed their warfighting philosophy from that of the traditional "close with and destroy" the enemy, attrition style of warfare, to Maneuver warfare. Rather than attack enemy strengths head on, the new Marine warfighting philosophy sought to "shatter the enemy's cohesion through a series of rapid, violent, and unexpected actions which create a turbulent and rapidly deteriorating situation with which he cannot cope."³ The Commandant's Warfighting Lab was tasked to develop a new concept that maximized the inherent advantages of maneuver warfare and combined them with modern technology. The result was Sea Dragon⁴.

The Sea Dragon concept envisions the employment of small, widely dispersed independent teams of light infantry inserted into enemy controlled territory. Their primary mission is to gather intelligence on enemy forces and installations and then to engage them with supporting arms. The intent is to confuse the enemy and hinder his actions by forcing him to react to attacks from numerous locations.

Once the commander has correlated the intelligence from his field units and is satisfied that the enemy forces have been sufficiently disrupted he can execute the main attack with his

³U.S. Marine Corps, FMFM-1, Warfighting, (Headquarters, U.S. Marine Corps, 6 March 1989), 59.

⁴Gangle, "Sea Dragon...Forward From the Sea", lecture.

heavy forces. During the attack, the light infantry will continue to gather intelligence and attack enemy forces as they respond to the more conventional amphibious assault.

The light infantry concept is designed around a six person reconnaissance/assault squad (RAS). The principle weapon of the RAS is not the traditional automatic weapon, but rather a target acquisition and designation weapon. Each squad is assigned a zone of action in which to conduct their mission. These zones will be scattered throughout the Amphibious Objective Area and could encompass an area up to 100 by 200 kilometers for a regimental sized zone. One of the key tenets of Sea Dragon is "Maneuver to engage by fires, not fire in order to maneuver". That is, the RAS's will reposition to enhance their ability to engage additional enemy forces with indirect fire, vice engaging the enemy with fires to enhance their ability to maneuver around them. Since their ability to maneuver and remain light is critical to their success, these units will be sea based and will require logistical and fire support from the sea.⁵

LAND THE LANDING FORCE

During the herculon days of the Second World War the concept of operational maneuver, the ability to find an enemy weakness and maneuver forces to exploit it, was a critical element in amphibious planning. General MacArthur's New Guinea and Philippine Islands campaigns, where he landed over 1 million men on Japanese controlled islands and suffered less than 300 casualties on the

⁵ibid

beachhead⁶, as well as his Inchon landing during the Korean war, depended heavily on maneuver warfare to defeat the enemy. Additionally, the ability of the Allies to mount an amphibious assault at will at almost any location along the European coastline tied down 40-50 German divisions that were desperately needed on the Eastern Front. Additionally, when the invasion finally did occur, the German defenders were so spread out, they were unable to effectively contain the landing.

Although in the past many of the tenets of maneuver warfare were used getting the amphibious forces to the beachhead, once they arrived, the warfighting philosophy quickly shifted to one of attrition warfare. Despite the large number of casualties often sustained trying to breakout of the beachhead, the overwhelming number of American troops, coupled with their massive firepower, and the inability of enemy forces to effectively attack the large number of relatively stationary amphibious ships lying just off the coast allowed the United States to prevail.

As America enters the 21st century the complexity and style of warfare has changed so that the US Military no longer has the luxury to conduct massive amphibious landings as it once did. Significant changes include:

- the shrinking size of the American military. Future planners can no longer rely on being able to mass an overwhelming number of ground troops.

⁶Terry C. Pierce, CDR, "Operational maneuver from the Sea," U.S. Naval Institute Proceedings, August 1994, 30-34.

-the proliferation of modern technology which has enhanced the ability of most countries to defend their coastline from traditional amphibious assaults. Amphibious ships tied to a relatively small geographic area within sight of the coast are extremely vulnerable to hit and run style attacks from aircraft and submarines as well as to shore based anti-ship cruise missiles.

As the Navy continues to shift its focus from open ocean fleet actions to operating in the littoral, it must develop new operating principles to fully exploit its advantages in technology and quality of personnel. Maneuver warfare is key to maximizing the advantage.

While the Navy has always been very comfortable with the concept of operational maneuver as a means to defeat the enemy battle fleet, to realize its full potential in the littoral, the Navy must fully exploit the concept as it applies to amphibious warfare. Sea Dragon is a Marine Corps vision aimed at fully exploiting the advantages of maneuver warfare and for the Navy to support that vision with the ships and landing craft available today and within the next ten years, a fundamental shift in amphibious doctrine is required.

NAVAL EXPEDITIONARY ACTION GROUPS

The notional three ship Amphibious Ready Group (ARG) in 2005 will still consist of a LHA/D, a LSD-41 class and a LPD-17 class amphibious assault ships with an embarked Marine Expeditionary Unit. However, Sea Dragon will entail a dramatic change in how they are employed and controlled.

Central to the Sea Dragon concept is the insertion, by MV-22's and to a lesser extent LCAC's, of numerous Reconnaissance/Assault Squads into a widely dispersed area in enemy held territory. These squads are totally dependent on sea based logistical and fire support. In order to fully support these widely dispersed units logistically and to be in a position to respond to fire missions, the amphibious forces must also be widely dispersed.

One solution would be to disperse the ARG and form it into three Naval Expeditionary Action Groups (NEAG). The NEAG's would be small, independent groups of 2-3 ships (1 amphibious with 1-2 surface combatants) operating within support zones throughout the objective area but located over the horizon from the enemy coastline. Additionally a CVBG consisting of a CV and 1-2 Aegis cruisers or destroyers would be in an operation area approximately 100 miles offshore.

The NEAG's will be self contained units capable of conducting independent actions in support of the overall objective. They will have the organic ability to insert and coordinate the actions of the assigned RAS's as well as providing logistical and fire support for them. While the NEAG's will enjoy tremendous freedom of action and will have a robust self-defense capability, they will at all times be within range of the air wing and should the need arise, they will have the ability to quickly extract their RAS's and join the CVBG.

The NEAG's are ideally suited to support the fluid and highly dynamic battlefield envisioned by the Sea Dragon concept. By

operating over the horizon, up and down the coastline, the NEAG's will be able to rapidly reposition forces based on the intelligence gathered by the RAS's and will be able to quickly insert additional forces to exploit any advantage uncovered. Initiative and maintaining a high tempo of operations will be critical to their success.

COMMAND AND CONTROL

The Naval Expeditionary Force (NEF) is a relatively new concept. As defined by the Chief of Naval Operations, ADM Boorda, the NEF is designed to integrate carrier battle groups, amphibious ready groups, and other support forces into a unified naval force that can project power in the littorals⁷. Currently, the commander of the NEF is, by virtue of his seniority, the CVBG commander. Unfortunately, the command relationships between the forces are commonly ad hoc in nature and not only are the staffs not integrated, they rarely work/train together. While this is changing, and combined CVBG-ARG work-ups are now being conducted, the lack of an integrated staff tends to result in the NEF commander and his battle group staff emphasizing the air wing at the expense of the amphibious forces⁸.

In the future, to fully support the Sea Dragon concept, a fully integrated command structure is needed. The commander of this staff would continue to be a Navy Rear Admiral but the deputy

⁷Jeremy M Boorda, ADM, "Navy-Marine Corps Team: Looking Ahead," Marine Corps Gazette, March 1995, 22.

⁸T.J. McKearney, CDR, Ret, "CNEF Arriving," U.S. Naval Institute Proceedings, January 1996, 36-40.

commander would be a Marine General Officer. The commander would have either an extensive amphibious or battle group background and the Chief of Staff would be selected to compliment that experience. The remainder of the staff would be similarly integrated into warfighting cells. One recent proposal has the staff broken down into 5 warfighting cells including; Expeditionary Operations, Sea Control, Strike, Logistics, and Command and Control Warfare.⁹

The current CWC concept will also have to be extensively modified if it is to provide the necessary command and control to coordinate the actions of the widely dispersed forces of the NEF. With the demise of the Soviet Union, the United States is no longer faced with a major blue water threat and the defensive orientation inherent in the CWC concept can be eliminated. Therefore, separate battle group AAW, ASW, and ASUW commanders are no longer necessary. Instead, the NEAG's would be responsible for their own self protection and a single Sea Control Commander would be responsible for allocating battle group resources to meet major threats to the force.

In transitioning to a more offensive posture, a Fire Support Commander (FSC) would be created and he would be tasked with coordinating support to any call for fire that could not be conducted with forces organic to the NEAG. The FSC would also plan and execute all Tomahawk missions and all aircraft strikes not requested by the RAS's.

The MAGTF commander would become the Ground Element Commander

⁹Ibid.

(GEC) and would also play a critical role in the revised command structure. He would be responsible for assigning zones of action to each NEAG and would consolidate the intelligence gathered by the RAS's. Based on the intelligence gathered, the GEC would be able to rapidly reallocate forces to exploit any advantage and recommend to the NEF commander the time and location to commit the heavy forces.

The final major players in the command structure would be the individual NEAG commanders. The NEAG would be commanded by the commanding officer of the amphibious assault ship. The working relationship between the NEAG Commander, his Marine ground commander, who, with his command element, would remain sea-based until the heavy forces are committed, and the commanding officers of the assigned surface combatants, is absolutely vital. Implicit in this relationship is a clear understanding of the operational commanders intent and that all efforts will be focused on supporting the Marines ashore. While each NEAG will operate independently, and the NEAG commander would be responsible for all actions within his zone, the Marine ground commander would have direct access to the MAGTF chain of command to coordinate the actions of his RAS's with that of other RAS's in their zones. If the NEAG commander was unable to comply with tasking requested by the GEC, he would immediately contact the NEF commander for additional guidance. The resulting command structure would be:

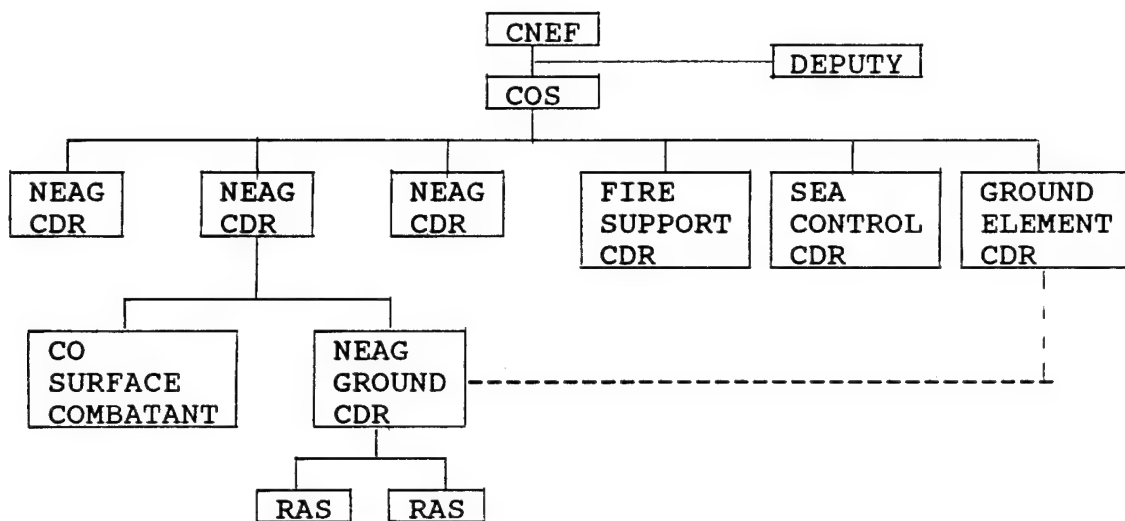


Figure 1. CNEF Command Structure

To coordinate and enable the Navy to support the actions of the RAS's, the Marine Corps must develop a highly sophisticated C4I system. Through this system the RAS's will be able to communicate with all forces of the NEF to coordinate intelligence, fire support and logistics. The system will be able to provide an integrated picture of the battlefield and will enable commanders to respond quicker to emerging situations.¹⁰ While the development of a new C4I system will significantly improve the centralized coordination of information, Sea Dragon's success will depend on decentralized execution and an implicit understanding by all levels of the chain of command of the NEF commanders intent.

Sea Dragon seeks to create a very chaotic battlefield that is constantly changing. Through the use of superior command and control, the Navy-Marine Corps team will keep the enemy unbalanced

¹⁰Gangle, "Sea Dragon...Forward From the Sea," lecture.

and leave him unable to effectively respond to the assault. By constantly probing and gathering intelligence with his NEAG's, the NEF commander will search for enemy critical vulnerabilities and once found, he will have the ability to rapidly shift forces to exploit those vulnerabilities. This style of warfare and its accompanying command structure will place a premium on the initiative and judgement of unit commanders¹¹ and individual sailors and marines, both traditional strengths of Navy and Marine Corps personnel.

NEAG OPS

The ability of the NEAG's to conduct wide ranging independent operations from over the horizon is critical to the success of Sea Dragon. Their inherent mobility and flexibility, coupled with their organic firepower will be decisive in the battle for the littorals. By approaching from the sea, and through the use of operational deception and security, the NEAG's will be able to approach their zones undetected. This will significantly enhance their ability to conduct low probability of detection insertions of the RAS's and will severely degrade the enemy's ability to counter the assault.

The NEAG commander will have the authority and capability to reposition his RAS's as necessary, within his zone. He would be able to ensure they are used to their maximum effectiveness or to withdraw them from an unfavorable situation. The NEAG's will have

¹¹Terry C. Pierce, CDR, "Taking maneuver warfare to sea," U.S. Naval Institute Proceedings, April 1995, 74-77.

the capability to launch LCAC's which could perform a variety of missions including; limited beach surveillance and reconnaissance, demonstrations off the coastline to deceive the enemy, and resupply of RAS's. The LCAC's could also be tasked to land LAV's to improve the mobility of the RAS's. Additionally, the NEAG's, with their organic air and ground assets will be able to quickly reposition and conduct limited raids against enemy coastal surveillance, missile, or other high value sites outside of the objective area as directed by the NEF commander.

Even though NEAG's are primarily designed to support Sea Dragon and the Marines, they are also ideally suited to support Special Operations Forces or Army Airborne units operating behind enemy lines. These forces will undoubtedly have compatible C4I equipment and are already well schooled in the principles of maneuver warfare and the decentralized style of control. This capability would also be especially useful to SOF forces conducting operations other than war.

Although highly independent, the NEAG's would need significant intelligence support to conduct their mission. Knowing the strength and location of enemy installations and their forces, as well as the expected battlefield terrain, will be vital to the important process of determining zones of action. Additionally, the ability to receive satellite imagery of the objective area would be instrumental in selecting potential landing zones and targets. During the course of the assault, real time intelligence from non-organic sensors on the enemy's reactions would ensure the

RAS's maintain the initiative and are not surprised by unexpected enemy actions.

AIR SUPPORT

The MV-22 is essential to the Sea Dragon concept. Its increased range and improved avionics will allow true all weather, over the horizon operations. While the majority of the MV-22's will remain with the LHA/D, each NEAG will be assigned at least one MV-22 to support their RAS's. Additionally, each NEAG should be assigned an AH-1 Cobra to perform escort duties and to provide fire support to the RAS's. If required for a specific mission, the NEAG commander would request additional MV-22 and AH-1 support, as well as AV-8 support, from the FSC. The Sea Dragon concept also foresees increased reliance on UAV's to conduct logistic, medevac and fire support missions¹². In keeping with the principles of decentralized control and to maintain the ability to rapidly react to new situations, the MV-22, AH-1 and UAV's will be organic to the NEAG and their tasking will be controlled by the NEAG.

Carrier air wings will continue to integrate both USN and USMC squadrons. The primary mission of the wing is to gain and maintain complete air superiority. Air superiority is absolutely critical to the success of Sea Dragon. It will enable the NEAG's to fully exploit their maneuverability by allowing them to operate dispersed and independently. Only after air superiority is achieved will NEAG operations commence and the air wing be freed to start conducting strike and ground support missions.

¹²Gangle, "Sea Dragon...Forward From the Sea," Lecture.

NAVAL SURFACE FIRE SUPPORT

The ability of a ship to place a round on a designated target when required is fundamental to the Sea Dragon concept. While modern technology has led to significant advances in most warfare areas, naval gunfire support has been a glaring exception. In fact, since the end of the Second World War, the Navy has experienced a dramatic decline in its ability to provide gunfire support to the Marines. Gone are the 16" guns of the battleships and the hundreds of destroyers armed with six 5" guns. Instead the Navy must now rely on 62 cruisers and destroyers armed with two 5" guns apiece and 25 destroyers armed with but a single 5" gun each. To further exasperate the situation, the range and lethality of the 5" projectiles fired by these guns has been virtually unchanged in the last 50 years.

In order to support Sea Dragon, the Navy must significantly improve its gunfire support capability. Fortunately, for relatively little cost, the Navy has the technology to develop and field a variety of 5" and 8" gun weapon systems that can provide that support¹³. These new systems will have the range necessary to conduct fire missions deep within enemy territory, while simultaneously allowing the surface combatant to remain safely over the horizon from the coastline. Both systems will fire laser guided projectiles which will significantly enhance their accuracy and will give the Marines the ability to neutralize targets with a

¹³Clarence T. Morgan, LCDR, "What does surface fire support cost?" U.S. Naval Institute Proceedings, November 1994, 94-97.

single salvo. Additionally, the 8" projectile will be extremely effective against hardened targets.¹⁴

Another fire support weapon at the disposal of the NEAG's is the Tomahawk cruise missile. However, due to its high cost and unique targeting requirements, Tomahawks will probably not be used in direct support of the RAS's. Rather, Tomahawks will continue to be used to strike heavily defended command and control nodes, air defense sites and strategic targets.

CONCLUSION

"Forward ... From the Sea" is the foundation for the employment of naval forces in the 21st century. In shifting its operational focus from open ocean fleet engagements against the Soviet Union to projecting power in the littorals the Navy has undergone a significant change in its warfighting strategy. Smaller, faster, deadlier are the axioms for this new strategy and their application to future combat will help reshape the Navy.

Sea Dragon is a Marine Corps concept for future warfare. The Navy's ability to adapt and fully support this and other new concepts is crucial if the Navy truly intends to maintain the viability of the Navy-Marine Corps team. This will require significant changes in the Navy's operational command structure, as well as its command and control doctrine, as the emphasis of the Navy's principle mission shifts from seeking out and destroying the enemy's fleet, to supporting ground forces ashore.

¹⁴Clarence T. Morgan, LCDR, "Fire Support: Fill the gap," U.S. Naval Institute Proceedings, September 1993, 53-55.

A Navy only operational staff would hinder its ability to effectively respond to the fluid style of warfare envisioned by Sea Dragon. Navy and Marine Corps personnel must be integrated at every level to achieve the implicit understanding of the commanders intent that is so vital to the concept. Additionally, only through decentralized control and a heavy reliance on the judgement and initiative of subordinate can the Navy-Marine Corps Team derive the maximum benefits inherent in operational maneuver.

Advanced technology and the high quality of personnel has given the U.S. Military the unique ability to fully exploit the inherent advantages of maneuver warfare and extremely high tempo operations. However, to dominate the future battlefield it is essential to maintain a balance between mobility and firepower.¹⁵ Naval gunnery has not kept pace with advances made in other warfare areas and its current lack of capability is a critical weakness to supporting any type of warfare in the littorals. Fortunately, for relatively low cost, the Navy can quickly deploy a new generation of gun weapon systems that will fully support the Marines well into the 21st century.

The formation of NEAG's would be an important step in creating a single integrated command structure which would enable battle forces to transition seamlessly from ship to shore. Mobile, independent and possessing robust logistical and fire support capabilities, the NEAG's would be the focus of the battle for the

¹⁵Edward B. Atkson, MajGen, Ret, "Maneuvering past maneuver warfare," U.S. Naval Institute Proceedings, January 1996, 33-35

littorals.

Give me a fast ship "for I intend to go in harms way" has been a guiding principle for the Navy since the days of John Paul Jones.¹⁶ The precepts of speed, maneuverability and taking the fight to the enemy are just as valid today as they were 200 years ago. By combining these precepts with modern technology and a command philosophy that emphasizes the traditional strengths of American sailors and marines, the United States Navy can be assured it will meet the challenges of tomorrow.

The win in the littorals, the Navy Expeditionary Force Commander must be able to attack with speed, violence and surprise. If the Navy is to effectively support the Navy-Marine Corps team, the Navy must adjust its operational philosophy and the NEAG provides a mean to go into "Harm's Way" and emerge victorious in the 21st century.

¹⁶Nathan Miller, The U.S. Navy, An Illustrated History (New York: American Heritage, 1982), 22.

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